#### Xinuo (John) Zhao

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### **WORK EXPERIENCE**

**Product Engineer** (February 2017 – Present)

Pro-Vision Video Systems, Byron Center, MI

- Perform research and development on new camera and DVR products
  - o Find overseas suppliers for product development
  - o Assist in sourcing products from overseas
  - o Communicate with overseas suppliers regarding product design, development, and manufacturing
  - o Daily communication with Chinese speaking electrical engineers and software developers
  - o Translate technical documentation between English and Chinese
- Manage, direct and implement the development and improvements to camera and DVR products
  - o Develop and/or update product specifications, procedures, guides, etc.
  - o Resolve technical quality and production problems through remote and onsite communication with suppliers
  - o Provide engineering support to technicians, sales, customer service, production and purchasing teams
  - Develop Web service to parse and serialize XML data using C/C++
  - o Develop Web UI to enhance DVR efficiency and ease of use
  - o Adjust camera configurations through terminal for better audio quality and viewing angle
  - o Generate easy-to-use camera and DVR firmware for customer use

## Principal Hardware Engineer (May 2016 – January 2017)

Medforall - Information Technology and Service, Columbus, OH

- Led hardware development, optimization, and validation; worked in a close interdisciplinary team
- Performed schematic capture, symbol creation, and PCB layout design of multiple devices
- Programmed environmental and motion sensor devices using Python and C

# Graduate Research Associate (August 2015 – May 2016)

Department of Electrical & Computer Engineering, Ohio State University, Columbus, OH

- Researched sensor and monitoring technologies in healthcare, industrial, and environmental fields
- Managed microcontroller based projects for new graduate students' individual study and project management course

#### **EDUCATION**

The Ohio State University, Columbus, OH GPA: 3.3

M.S. Electrical & Computer Engineering (embedded systems), Graduation: May 2016

Pittsburg State University, Pittsburg, KS GPA: 3.8

B.S. Electronics Engineering Technology, Minor Mathematics, Graduation: May 2014

# ACADEMIC ENGINEERING PROJECTS

Airborne Soil Moisture Mapping OSU & MIT Lincoln Laboratory (August 2014 – May 2016)

- Developed a 4-layer microcontroller PCB for an airborne radiometer to collect position and altitude data
- Implemented the data handling system with an ARM Cortex-M4 MCU, ADC, BME280 Barometer, and GPS

Wearable Health Monitoring Device OSU & Fuse by Cardinal Health (June 2015 – May 2016)

- Developed a wearable device that monitors a user's health condition (heart rate, muscle tension, etc.)
- Designed the hardware (PCB) for the wearable device and participated in firmware development

Temperature Monitoring System for OSU Airport OSU (September 2015 – May 2016)

- Developed a monitoring system using i-Q350 sensors from Identec Solutions to test if the ambient temperature near airplane runway (in winter) is suitable for LED edge lights

iTap Drink Dispensing System Pittsburg State University (August 2013 – May 2014)

- Built an automatic drink dispensing system by implementing a microcontroller and PLC system controlled by a mobile application through Bluetooth, which led to the function of dispensing a certain amount of liquid after receiving orders

### **QUALIFICATIONS**

- Programming: C/C++, JavaScript, Java, AngularJS, HTML&CSS, Python, Node.js
- Software: Visual Studio, Eclipse, Android Studio, Xcode, Git, Eagle CAD, OrCAD and Allegro
- Hardware: GC6500, MT7620, MSP430, ARM Cortex M, BeagleBone, Simblee, CC2650 SensorTag, XBee
- Hands-on rapid prototyping skills including soldering, reflow and rework of PTH and SMD components
- Experience with laboratory equipment such as multimeter, logic analyzer, oscilloscope, etc.
- Experience with Android and iOS app development and website development